

XML filtering systems aim to provide fast, on-the-fly matching of XML-encoded data to large numbers of query specifications containing constraints on both structure and content. It is now well accepted that approaches using event-based parsing and Finite Automata are the most effective.

Keywords: Nondeterministic Finite Automaton, XML filtering, content-based matching, nested path expression, path sharing, predicate evaluation, structure matching

5 [Algorithms for large-scale flat placement](#)

[Jens Vogen](#)

June 1997

DAC '97: Proceedings of the 34th annual Design Automation Conference

Publisher: ACM [Request Permissions](#)

Full text available: [PDF](#) (1.89 MB)

Bibliometrics: Downloads (6 Weeks): 2, Downloads (12 Months): 24, Downloads (Overall): 324, Citation Count : 1

This is a survey on the algorithms which are part of a program for flat placement of large-scale VLSI processor chips. The basis is a quadratic optimization approach combined with a new quadrisection algorithm. In contrast to most previous quadratic placement algorithms, it does not require a fixed number of iterations.

6 [A grid-enabled MPI: message passing in heterogeneous distributed computing systems](#)

[Ian Foster](#), [Nicholas T. Margolis](#)

November 1998 **Supercomputing '98:** Proceedings of the 1998 ACM/IEEE conference on Supercomputing (CDROM)

Publisher: IEEE Computer Society

Full text available: [PDF](#) (52.16 KB)

Bibliometrics: Downloads (6 Weeks): 6, Downloads (12 Months): 57, Downloads (Overall): 879, Citation Count : 1

Application development for high-performance distributed computing systems, or computational grids as they sometimes called, requires "grid-enabled" tools that hide mundane aspects of the heterogeneous grid environment without compromising performance.

Keywords: MPI, MPICH, Message Passing Interface, computational grids, globus, metacomputing

7 [TRAC: toward recency and consistency reporting in a database with distributed data sources](#)

[Jiansheng Huang](#), [Jeffrey F. Naughton](#), [Miron Livny](#)

September 2006

VLDB '06: Proceedings of the 32nd international conference on Very large data bases

Publisher: VLDB Endowment

Full text available: [PDF](#) (588.56 KB)

Bibliometrics: Downloads (6 Weeks): 1, Downloads (12 Months): 20, Downloads (Overall): 223, Citation Count : 1

Distributed computing environments, including workflows in computational grids, present challenges for monitoring, as the state of the system may be captured only in logs distributed throughout the system. One approach to monitoring such systems is to use a distributed monitoring system.

8 [Splitting interfaces: making trust between applications and operating systems configurable](#)

[Richard J. McLaughlin](#), [Lionel L. L. Liao](#)

November 2006

OSDI '06: Proceedings of the 7th symposium on Operating systems design and implementation

Publisher: USENIX Association

Full text available: [PDF](#) (387.24 KB)

Bibliometrics: Downloads (6 Weeks): 9, Downloads (12 Months): 35, Downloads (Overall): 178, Citation Count : 1

In current commodity systems, applications have no way of limiting their trust in the underlying operating system (OS), leaving them at the complete mercy of an attacker who gains control over the OS. In this work, we describe the design and implementation of a system that allows applications to limit their trust in the OS.

9 [Verification of a Microcontroller IP Core for System-on-a-Chip Designs Using Low-Cost Prototyping Environments](#)

[Stephen Schmitt](#), [Wolfgang Rosenstiel](#)

February 2004

DATE '04: Proceedings of the conference on Design, automation and test in Europe - Volume 3

Publisher: IEEE Computer Society

Full text available: [PDF](#) (281.80 KB)

Bibliometrics: Downloads (6 Weeks): 1, Downloads (12 Months): 24, Downloads (Overall): 134, Citation Count : 1

Rapid prototyping is a fast and efficient way for the functional verification of Systems-on-a-Chip in an early st. of the design process. Because of the rising part of software in those systems the use and reuse of microcontroller IP cores is necessary ...


10 [Layout aware optimization of high speed fixed coefficient FIR filters for FPGAs](#)

[Shanmug Mirzavi](#), [Ryan Rasner](#), [Arvin Hosangadi](#)

January 2010

International Journal of Reconfigurable Computing : Volume 2010

Publisher: Hindawi Publishing Corp

Full text available  (1.30 MB)

Bibliometrics: Downloads (6 Weeks): 0, Downloads (12 Months): 0, Downloads (Overall): 0, Citation Count: 0

We present a method for implementing high speed finite impulse response (FIR) filters on field programmable gate arrays (FPGAs). Our algorithm is a multiplierless technique where fixed coefficient multipliers are replaced with a series of add and shift.

11 [Sub-block subsampling based block-matching motion estimation](#)

[Reeza Karah](#), [M. Bankarainigam](#), [J. Raja Paul Perinbam](#)

December 2004 **AI '04: Proceedings of the 4th WSEAS International Conference on Applied Informatics and Communications**

Publisher: World Scientific and Engineering Academy and Society (WSEAS)

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count:

Motion estimation has been widely employed in popular video standards like H.26x, MPEG-1, -2 and -4 to exploit the temporal redundancies inherent within image frames. Block matching is the most popular method for motion estimation. The disadvantages

Keywords: SSSAD, block matching, full search, motion estimation, sub-block, sub-sampling

12 [Proceedings of the conference on Design, automation and test in Europe: Proceedings](#)

[Georges Chelien](#)

March 2006

DATE '06: Proceedings of the conference on Design, automation and test in Europe

Publisher: European Design and Automation Association

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count:

Welcome to the **DATE 06** Conference Proceedings. DATE combines the world's favourite electronic systems design conference and Europe's leading international exhibition for electronic design, automation and test. The **DATE 06** event features

13 [Energy-Aware Communication and Task Scheduling for Network-on-Chip Architectures under Real-Time Constraints](#)

[Jingxiao Hu](#), [Badr Maroufagha](#)

February 2004 **DATE '04: Proceedings of the conference on Design, automation and test in Europe - Volume 1** : Volume 1

Publisher: IEEE Computer Society

Full text available  (154.78 KB)

Bibliometrics: Downloads (6 Weeks): 11, Downloads (12 Months): 110, Downloads (Overall): 413, Citation Count:

In this paper, we present a novel Energy-Aware Scheduling (EAS) algorithm which statically schedules both communication transactions and computation tasks onto heterogeneous Network-on-Chip (NoC) architectures under real-time constraints. Our algorithm

14 [A survey of fault tolerant methodologies for FPGAs](#)

[Jasen A. Cheshkov](#), [John M. Emmert](#), [Stan Baumgart](#)

April 2006

Transactions on Design Automation of Electronic Systems (TODAES) : Volume 11 Issue 2

Publisher: ACM 

Full text available  (932.02 KB)

Bibliometrics: Downloads (6 Weeks): 18, Downloads (12 Months): 142, Downloads (Overall): 899, Citation Count:

A wide range of fault tolerance methods for FPGAs have been proposed. Approaches range from simple architectural redundancy to fully on-line adaptive implementations. The applications of these methods also differ; some are used only for manufacturing.

Keywords: FPGA, fault tolerance, self test

